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AMERICAN CITY & COUNTY®

August 1988

Vol. 103, No. 8

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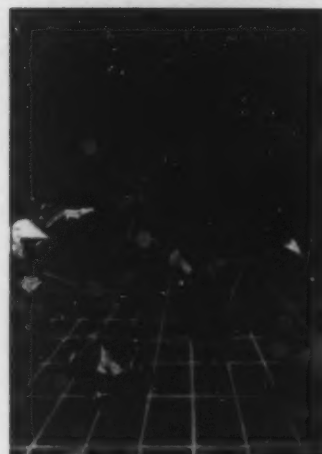
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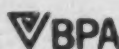
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EDITOR'S VIEW

Teaming for Success

A year ago, Bill Davis of the National League of Cities (NLC) visited Atlanta to promote the League's Election '88 Task Force program, which he heads. Bill and I had never met but he considered the impact of *American City & County* important in mobilizing the universe of city, county and state officials. Bill was meeting with a number of publications then to drum up editorial support for the NLC presidential campaign agenda.

The Task Force, Bill said, was preparing a report on the national scope of urban problems and needs, in an effort to focus the attention of presidential and congressional candidates on the urban agenda. This was to be a coordinated, non-partisan effort to showcase the importance of urban health to national economic goals, and to once again create a partnership between federal and local governments.

At about the same time, the U.S. Conference of Mayors prepared a policy paper titled a "National Urban Investment Policy." The goal was the same — to put a renewed emphasis in federal priorities toward urban needs such as housing, drug abuse, poverty and infrastructure repair. Last September, a condensed version of that report appeared in *American City & County*, and this past April, the NLC report, "Investing in Home Town America: Ten Issues for the 1988 Elections," was featured.

The fact both organizations issued 10-point policy outlines is no coincidence, but the result of cooperation between them. Perhaps at no time in recent memory have partnerships between local-government associations been as strong as during the past year. The NLC, Conference of Mayors, National Association of Counties, National Conference of State Legislatures and the National Association of Regional Councils are among the groups that have joined forces to present a unified program for discussion by presidential and congressional candidates.

Bill Davis and I talked a year ago about the impact such an effort could have in establishing an urban agenda for the next administration. Local-government organizations had virtually sat on their hands, or acted in concert with no one but their own members, since the 1976 elections. But the opportunities presented by this year's political process offered an open door to state and local governments to rebuild the decaying federal/local partnership. The key, however, was not simply that the

opportunity had availed itself, but how the program was presented in a cooperative, non-partisan fashion.

Credit these local-government groups with a job well done — to this point. They have succeeded in placing their agenda at the top of the campaign discussion lists. To be sure, budget deficits and foreign policy were the early focal points of debate for most of the presidential contenders. But as the primary season wore on, the switch to the human issues so well known by city and county leaders began to take center stage.

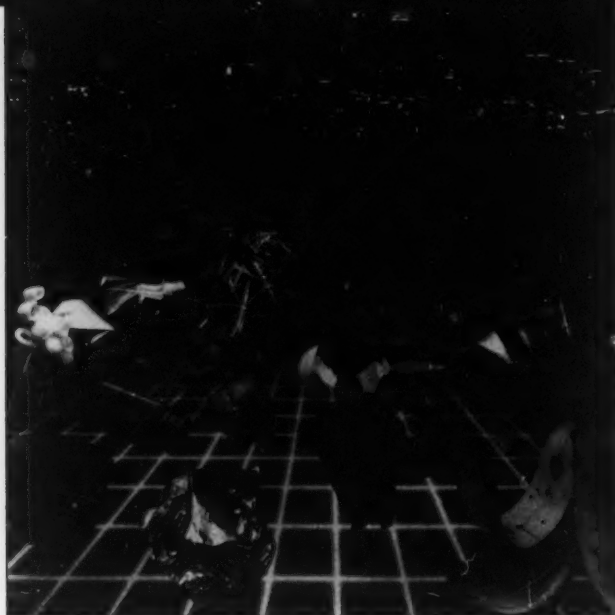
Take, for instance, Democrat Michael Dukakis, whose speech at the recent meeting of the U.S. Conference of Mayors dealt primarily with the American drug-abuse problem, among the top concerns of local officials. Dukakis also promised as president he would establish a select advisory panel of local-government leaders to maintain a dialogue between his office and grassroots government. He also has been a proponent of such local issues as housing, education, job training and, to a lesser degree, infrastructure maintenance.

Republican presidential candidate George Bush also has taken domestic issues to heart, apparently recognizing the importance these people-issues will play in November. In a letter to the U.S. Conference of Mayors, the vice president said, "America needs a new working relationship between the federal government and the cities."

Bush also plans to establish a Task Force on Urban Affairs, "which will be in everyone's interest (to) devise strategies for the urban agenda. Though massive amounts of federal aid are not available, my goal is to shape a federal role that serves as a catalyst to help the cities solve their problems." He, too, is on the drug-abuse bandwagon, and adds education, child care, housing and homelessness to his domestic agenda.

Without the impetus provided by the NLC, Conference of Mayors, National Association of Counties and others, these breakthroughs may not have been possible. Excellent planning, coordination and cooperation have brought some success to this point, but local-government officials still need to press the congressional candidates in their districts and the presidential hopefuls about their stands on these issues. Ambiguities need to be fleshed out with real-world programs. The opportunity is golden, but the work is not done. □

— Ken Anderberg



WESTINGHOUSE

Recycling Gains Ground

By Anne Magnuson

Sheep rancher Ed Filbin of Westley, Calif., believes in keeping spare tires. In just three years, he accumulated 40 million of the rubber rings. Today, a \$41-million, privately owned energy system in Westley burns 700 to 800 of Filbin's tires an hour — enough to produce electricity to power 15,000 homes a year.

"I always figured that if you collect enough of something, there'll be a market for it sometime," Filbin says.

In Clifton Park, N.Y., landfill manager Louis Gerard stores tires, hoping to salvage them someday, and recycles white goods, newspaper, glass, metals, building materials, car batteries and motor oil. "We don't recycle for the money per se, but save on space and handling," he says. His county is under state pressure to build a 400-ton-per-day (tpd) capacity waste-to-energy plant.

Recycling programs that make good use of all types of solid waste are a welcome adjunct to resource-recovery operations, lowering the cost of burning trash, improving combustion, appeasing environmentalists, protecting water supplies and promoting recycling industries.

"Absolutely, there is a national trend to recycle along with resource recovery," says Allen Hershkowitz, president of the Municipal Recycling Association in Elmsford, N.Y. Cities, townships and counties proceed with numerous schemes to recycle and burn on the drawing boards, but few put these ideas into operation.

Hershkowitz, formerly of the New York-based environmental research group Inform, urges communities to hire recycling specialists, not just lawyers and engineers, when setting up a recycling program. Obtaining good advice is the biggest obstacle in launching a recycling program, he says.

"Sometimes there is an inversion of sound economics, with siting of waste-to-energy plants, before recycling is underway, as in Albany and Westchester County, N.Y., and Boston," Hershkowitz says. One solution is to create a recycling blueprint before the costly system is built, lowering the amount of garbage guaranteed by the community and decreasing the burn plant's volume.

New Jersey and New York promote a four-pronged

disposal attack: waste reduction, recycling, resource recovery and landfilling (especially of ash and unburnables), in that order. Currently, New York operates seven trash-to-energy plants, and state officials predict up to 38 will be operating by the year 2000. Two are under construction in New Jersey, where recycling is mandatory, and the state stresses future resource recovery.

Wilton, N.H., with a 1979 Consumat incinerator, made \$32,000 last year recycling everything from yard clippings to Styrofoam packaging, and saved \$40 per ton by salvaging scrap metal. "Recycling reduces the volume of the burn," explains Donald Chambers, co-manager of the Wilton Recycling Center, "and it changes the nature of the burn. Keeping out metal and plastic makes for less potential toxic ash and emissions."

At a 3,150-tpd mass-burn plant in Pinellas County, Fla., operators extract 25,000 tons of metal a year from the ash, saving \$37.50 per ton in landfill costs. "We have sold the metal under contract since 1983 and hope to remove 40,000 tons per year from the ash in 1989," says Robert Van Deman, county director of solid-waste management.

The keys to successful recycling are the market, collection and public relations. Unsteady markets may crash, and a three- or five-year purchasing contract is difficult to come by, recycling coordinators say.

An Albany, N.Y., environmental consultant, Gordon Boyd, says intermediate-processing facilities (IPFs), also called materials-recovery facilities, represent a new trend in garbage-disposal efforts.

Whether publicly or privately owned and operated, these centers take care of sorting, baling, cleaning, shredding, storing and marketing recyclables. Industries buying used materials prefer clean and sorted goods in large, consistent quantities, made possible by IPFs.

Boasting the country's largest recycling program per household, San Jose, Calif., serves 180,000 homes with 55- to 60-percent voluntary participation. Garbage disposal in San Jose does not utilize waste-to-energy technology, but it is a showcase of IPF efficiency.

Cans, glass bottles and newspapers are collected from three bins at curbside and transported to a privately



owned processing yard. "The city does the publicity," notes recycling program manager Richard Gertman, "and the contractors do all the rest of the service — hauling, processing and selling the materials."

The IPF charges San Jose \$1.8 million a year or \$10 per household. Citizens pay \$5.99 a month for inclusive garbage service, and the IPF receives profits. The city recycles 8 percent of its garbage, and the collecting company pays the city the avoided cost of \$8.03 per ton of recyclables. The processing center returns money to San Jose based on the amount of recyclables recovered and current market prices.

Saugus, Mass., began recycling newspapers nine months ago to complement its 12-year-old resource-recovery system. Expecting public apathy, the city plans to advertise recycling regularly to maintain interest, according to administrator Joseph Giancola.

Eventually, Saugus will transport its reusable materials to a state collection center in Springfield. The state will buy the waste from Saugus at a market price, so profits will fluctuate week-to-week, says Giancola.

"We will need to obtain trucks, either purchase or lease them, or remodel our trucks, or buy compartmentalized ones to collect curbside," he says. "Collection will be difficult, as the public must be educated to separate (trash) at the source



into eight separate containers. We will give them to residents, and they will purchase others as needed." Saugus will recycle plastics, glass, newspapers, metals, aluminum and tin cans.

Michael King of the Massachusetts Division of Solid Waste Management says the state will position 12 IPFs, with the one in Springfield to be state-owned yet privately operated by 1989. To bring in the recyclables, trucks will be partly state-funded.

The biggest disadvantage of IPFs, according to Boyd, is "sometimes having to travel hundreds of miles." Another major IPF pitfall is disposing non-recyclables. Even shredding a junk car leaves 25 percent unusable waste. This is the cost of doing business, Boyd says.

Mixed recyclables can be transferred best directly from curbside to be sorted and upgraded at the processing center. "By pulling out valuables, the volume of waste can be reduced 30 to 60 percent," Boyd says.

The number of processing centers expands to cover large areas or deal with large populations. A new IPF is on-line for New York in Queens, and a \$4-million IPF is under construction in Brooklyn.

The more-common collection methods, either curbside or drop-off centers, create logistical problems. "If you can't harvest it, you can't market it," Boyd says.

Commentary

Recycling: A National Effort

By J. Winston Porter

With more than 80 percent of all household and commercial garbage today ending up buried in landfills, America is heading for a major solid-waste disposal crisis.

The United States produces more than 150-million tons of garbage per year. By the year 2000, that figure could increase by 40 million. Nearly one-third of this country's current landfill capacity will be full within five to six years. In addition, obtaining citizen approval to locate new waste-treatment or disposal facilities has become increasingly difficult.

There are no simple answers to this very serious problem, and solving it will require new attitudes about solid waste on the part of all citizens. Ultimately, as consumers, everyone may have to develop new behavior patterns.

First, no matter how hard Americans work to change their behavior, municipal landfills and trash incinerators will be needed for years to come. By cutting down on the amount of trash requiring disposal in the first place, however, U.S. citizens can decrease their reliance on these disposal options.

The U.S. Environmental Protection Agency (EPA) favors an integrated solid-waste management strategy that includes: reducing the amount of solid waste generated, recycling as much refuse as possible, incinerating some garbage with appropriate environmental controls (usually with energy recovery), and continuing safe landfill practices.

EPA is promoting a national four-year goal of reducing the amount of municipal solid waste bound for disposal by 25 percent. Currently, the United States recycles only about 10 percent of total refuse nationwide. About half of all aluminum cans, one-third of newspapers, and about 10 percent of glass bottles are recycled currently.

In contrast, only about one percent of all plastic goods and very few rubber products, such as tires, now are recycled. A few innovators are collecting yard and food wastes

for composting, but these efforts are minimal.

A 25-percent recycling goal should not be rigidly adhered to in every community and every state. But that goal is realistic for the country as a whole.

Government officials can play an important role in helping solve the garbage problem. Municipalities should plan for collection and recycling markets and oversee the operation of all facilities. State governments should provide statewide solid-waste planning, and develop necessary laws, regulations, and enforcement.

The federal government should conduct research and development, serve as a clearinghouse for information, provide a national perspective on the issue, and develop certain underlying regulations.

The United States cannot achieve this 25-percent goal by government efforts alone, however. Individual citizens and businesses must begin to take a more active role in the recycling process.

Involvement can begin with participation in a source-separation program. Most recycling efforts start with the consumer separating refuse into such elements as metal, glass, paper and plastic.

To a large extent, increased separation increases the value of recycled materials. Therefore, local homeowners, renters and businesses should cooperate with separation programs. Where existing recycling programs do not exist, citizens should push for them with local officials, private firms, service organizations or non-profit groups.

No single group can do the job alone, but the collective recycling efforts of everyone will help solve the garbage problem. □

J. Winston Porter is assistant administrator for Solid Waste and Emergency Response, U.S. Environmental Protection Agency.

When implementing collection, "the first hurdle is how to integrate the historical service in your town with what you want to change it to," Boyd says. "If people have taken papers to the church each week, do you want to interfere?" he asks, adding politically strong leaders can develop popular plans that induce cooperation with haulers and the public.

"Source-separation entails work," Boyd says. "I'd rather talk about not mixing. Would you throw your beer bottles into the laundry basket? Mixing makes an unmarketable product."

In Champaign, Ill., administrators found the recycling container makes a difference. Collectors deposit newspapers, cans and glass at curbside. "When we first started, we didn't have any containers, and participation was about 20 percent," says General Services Director Samuel Chandler. "When we gave everyone a 'blue box,' participation went up to 80 percent, and now it's down to 60 to 65 percent on a monthly basis." The blue box is square so folded newspapers layer the bottom, and brown bags of cans and bottles fit on top.

The Community Recycling Center, funded by Champaign County and the cities of Urbana and Champaign, also markets corrugated cardboard, recycled oil, high-grade office paper, computer paper, and high-density plastics such as milk jugs and bleach containers.

Champaign's program aims at 50-percent waste reduction in five years. Already, aggressive composting reaps 20 percent from the waste stream. Yard waste is collected curbside once a week in the fall, two weeks in winter for Christmas trees and in the spring.

Chandler says Champaign soon will target high-density environments such as high-rise apartments, dormitories and multi-family dwellings for drop-off sites. City planners will provide large, decorated, labeled trash cans this summer.

With seven different sanitation companies competing for Champaign householders' trash, one problem the city faces is discontented haulers who are losing money. A separate contractor hauls newspapers, cans and glass.

This hop-scotch system will end when Champaign initiates profitable zones for each hauler, collecting recyclables on the same designated day. Haulers will be required to buy a license and participate in the recycling program.

Chandler advises communities to hire a recycling coordinator whose sole job is to implement and run the recycling venture. "Recycling costs a lot of money, and someone must manage it, committing to more than two or three hours a week," he says.

Transportation is critical also for the Pinellas County, Tampa Bay, Fla., metropolitan area, which encompasses 24 cities. "The cities have the trucks and the county doesn't," says Van Deman, so cities with municipally owned or contracted collection vehicles develop the recycling systems. The county recycles internally, he says, by recovering paper and selling obsolete equipment.

Connecticut, Rhode Island, New Jersey and parts of Oregon mandate recycling, along with some counties, towns and cities such as Philadelphia. Mandatory recycling shows government commitment to saving money and the environment, but a fail-

ure to inspect for compliance demonstrates government indifference, some planners say.

In Old Lyme, Conn., if residents do not source-separate cans, newspapers, magazines and glass, their garbage collection may be suspended by local ordinance. Other communities shame errant householders by putting brightly colored stickers on their trash cans.

In rural Saratoga County, N.Y., administrator Chris Callahan says the recently enacted bill requiring mandatory recycling for newspapers and white goods allows recycling to begin slowly. "The county would like to crawl before it walks," he says.

Saratoga, which voted down a \$60-million, 400-tpd mass-burn plant last December, avoided spending millions of dollars to burn trash like some larger cities. Lawmakers support recycling because it appeals to those for and against the burn plant.

Where source-separation is voluntary, various imaginative schemes lure participation. In Columbus, Ohio, officials conduct a monthly lottery, asking residents to label their curbside recycling bins with their name and address for the drawing.

"A weekly pickup becomes so habitual, residents get used to doing it, so it's nothing special," says Chandler. "You need consistency, a separate day for recycling, always the same day."

Pilot studies are useful sometimes as in Columbus, a city with voluntary recycling and a 2,000-tpd, refuse-derived fuel facility. Public-works officials provide special collection bins to some homes but not to others, initiate recycling in both low- and high-income areas, place polyurethane refuse bins in alleys, encourage curbside pickup in other parts of the city, and try out automated vs. manual waste collection. With these pilot-study parameters involving 3,000 households, policymakers hope to calculate what works best for Columbus.

The city anticipates theft of recycling bins in alley-

ways, however. "Mom and pop scavengers may pick up the aluminum cans and glass," says local analyst Dennis Laroche.

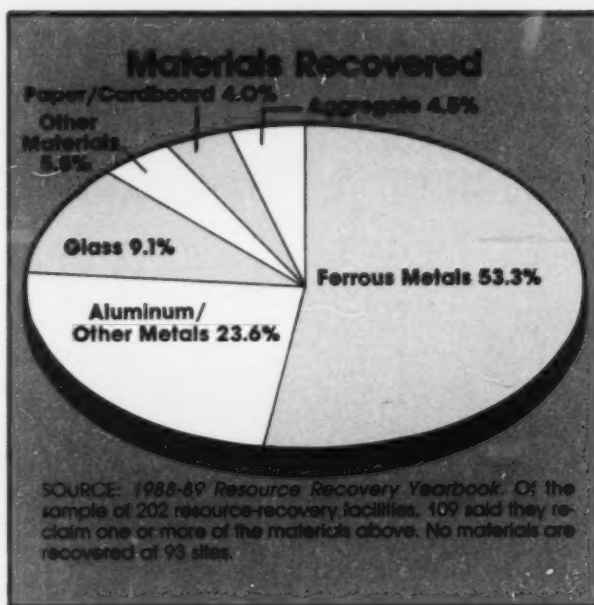
Although surveys show greater citizen participation with curbside collection, Wilton, N.H., residents defy odds. With a population of 9,000, 60 percent of its residents take reusable materials to drop-off centers.

Wilton, which plans to add a turbine for generating electricity to its incinerator built in 1979, has a long list of recyclables that will not burn in its trash-to-energy plant. The city recycles 40 percent of its wastes — newspapers, magazines, corrugated-cardboard and brown paper bags, mixed clean paper, colored ledger paper, glass, high-density polyurethane plastics, clear polyethylene terephthalate (PET), green PET, Styrofoam packaging, aluminum and tin cans, aluminum foil, car batteries, light iron-exhaust systems, wire, galvanized cans, valuable metals such as copper and brass, reusable goods such as sofas and appliances, clothing and rags, kitchen scraps, leaves, and grass clippings for compost.

Wilton makes its point: Recycling is cumbersome, but cost-effective. □

Anne Maguson is a correspondent for American City & County based in Clifton Park, N.Y.

RESOURCE RECOVERY



Contracting for Energy

By David Sokol

When municipalities implementing waste-to-energy projects begin to develop financing plans, the electrical or steam sales agreement represents a critical component in stabilizing long-term disposal costs. The disposal cost often is referred to as the "tipping fee," which is expressed on a per-ton basis. Typically, the tipping fee escalates annually, and this variable controls the economic feasibility of the project.

To maintain a reasonable tipping fee and minimize residential and commercial rate hikes, local governments and project developers should work together to obtain the best possible electrical or steam sale agreement.

Because energy payments from the purchasing utility often represent 35 to 45 percent of a project's annual operating revenue, the influx of electrical revenues during a facility's operating life is an important factor in determining tipping fees. Due to federal legislation passed more than a decade ago, waste-to-energy facilities have been able to qualify as alternative power sources.

The Public Utility Regulatory Policies Act (PURPA), instituted under the National Energy Act of 1978, created a market for power generated by private, non-utility developers and expanded opportunities for energy-production pioneers. The act mandated investor-owned utilities and public-power districts, as well as their wholesale suppliers, purchase a certain percentage of their generation capacity from independent power producers.

At the state level, public utility commissions (PUCs) exercised flexibility and determined whether independently produced power had to come from renewable resources (i.e., wind power, hydro, biomass and solid waste), or could be purchased from large industrial concerns that provided their own supply and had additional capacity remaining to sell to the utility. Sawmills, oil refineries and chemical companies represent the latter.

Most PUCs felt PURPA should give small entrepreneurs a chance. As a result, the early 1980s were marked by a proliferation of small developers, joint ventures and partnerships anxious to enter the independent, power-production market.

Since its enactment, however, PURPA has become controversial. During the past 10 years, the international politics affecting the supply of imported oil have changed significantly. Although the Organization of Petroleum Exporting Countries

(OPEC) still controls the bulk of the world's oil supply, crude oil prices have fallen to approximately \$14 per barrel. In addition, an abundant hydropower supply, coupled with utilities' ability to transport power over long distances, has led to greater economies of scale, making a stronger case against alternative power.

While economic incentives to pursue domestic oil exploration have vanished, alternative fuels still play an important role in diminishing America's reliance on foreign oil. As this nation enters a new decade, PURPA, as the critical legislation enabling municipalities to

stabilize their tipping fees, is undergoing significant changes that may weaken its original intent substantially. What impact will these changes have on the tipping fees municipalities must pay for waste disposal?

The majority of waste-to-energy projects generate electricity that is sold to an investor-owned utility or public-power district. To facilitate long-term contractual arrangements, these projects must be approved by the Federal Energy Regulatory Commission (FERC) prior to project financing. If approved, they are referred to as qualifying facilities (QFs).

Since a community's waste-disposal service contract extends usually for 20 to 25 years, the electrical sales agreement must cover the same term to ensure bondholders are paid, and the municipality is guaranteed a revenue stream during the project's life. Most waste-to-energy projects are based on dual revenue streams to cover the project's costs. Ideally, tipping fees generate 60 to 70 percent of total revenue, while electrical and/or steam sales account for the remainder.

In a typical transaction, the city or county receives 90 percent of energy revenue, with the balance going to the private contractor. Electricity contracts must stand alone and be attractive to the host utility as a reliable, economic source of power — without using the enforcement implicit in PURPA, mandating a percentage of the utility's power be purchased from private developers who use renewable resources as fuel. Nevertheless, different types of contracts exist. Without the power of PURPA, some utilities may be unwilling to take on additional capacity, even when it is more economic than their own.

The types of electrical agreements vary from project to project. All, however, involve an energy payment based on kilowatt-hours (kwh) the facility delivers to the utility. In addition,

Cents/Kilowatt-Hour Paid for Electricity			
Sample	Mean	Minimum	Maximum
All Facilities	5.80	1.49	12.77
Planned Facilities	6.11	1.85	12.77
Existing Facilities	5.25	1.49	12.02

SOURCE: 1988-89 Resource Recovery Yearbook. Of the 135 waste-to-energy projects generating electric power, 104 furnished price information.

capacity payments are made to projects for making available generating capacity, should the utility need it.

Although the heat content of the waste, and amount of energy produced, may vary from season to season, capacity payment is fixed for 20 to 25 years. The energy payment varies annually at a rate defined by a cost index, or on the basis of other fuel costs.

The 1,125-ton-per-day Walter B. Hall Resource Recovery Facility, located in Tulsa, Okla., primarily provides 240,000 pounds of steam per hour to an oil refinery located near the facility. Should the Public Service Co. of Oklahoma (PSO) experience a major outage and need additional power, the resource-recovery facility would be obligated to provide PSO with 16 megawatts (mw) of peaking and emergency power at a rate of 6.36 cents per kwh from the facility's 20-mw turbine.

Under PURPA, numerous state utility commissions, most notably the California Energy Commission (CEC), allowed utilities to enter into standardized contracts, called Standard Offers (SOs), that provided the same terms, regardless of the type of fuel used. From the independent power producer's perspective, SO No. 4 contracts in California represented the most lucrative deal because they paid the highest rate per kwh, based on the avoided cost of building additional natural-gas or oil-generation capacity. Subsequently, California utilities proved to the CEC hydropower can be purchased from the Pacific Northwest at significantly lower rates. SO No. 4 contracts no longer exist, and the market for non-utility

land, N.Y., utility's appeal of a PUC-set avoided-cost rate of six cents per kwh has sent a confusing signal to state PUCs. The ruling revoked previous interpretations by stating utilities involved in interstate commerce (Orange & Rockland and its associated customers supplied power to part of New York, New Jersey and Pennsylvania) can no longer be forced to buy electricity for more than the cost of generating power alone.

Since 1981, New York has required utilities to pay certain independent producers six cents per kwh for electricity; Orange & Rockland says it now can produce that amount for 2½ cents. The ruling appears to have pre-empted the utility company from establishing minimum prices for avoided cost. In particular, FERC's decision seems to reserve the original intent of Section 210e, which gave state PUCs authority to set their own minimum and maximum avoided-cost rates.

In working with utilities, tailoring the agreement also is helpful. Most electrical agreements have clauses for on-peak and off-peak power purchases. A utility's demand curve usually peaks between 7 a.m. and 11 p.m. Some contractual arrangements provide a higher avoided cost for energy supplied during hours of heavy usage. Flexibility is a necessity in negotiating an electrical agreement; no two are exactly alike. From the private contractor's perspective, what is good for the utility also is good for the private operator and municipality.

Through the benefits of the Public Utilities Holding Act, some investor-owned utilities are entering the independent power market and developing waste-to-energy projects through separate subsidiaries that provide tax benefits in the form of accelerated-depreciation rates. Waste-to-energy system contractors, however, should not perceive this as a competitive threat.

In the future, waste-to-energy system contractors likely will team up on projects with investor-owned utilities. The systems

contractor could operate the plant for 20 to 25 years, while the utility would retain ownership. Many municipalities with limited bonding capacity could rely on their local utility to finance the facility by contributing equity.

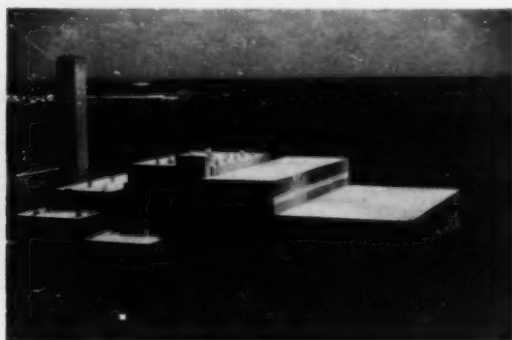
This potential business partnership further reinforces the need to strike an agreement mutually beneficial to both parties, rather than using the coercive power of PURPA to obtain the most lucrative avoided cost. As a private owner, utilities should hire an experienced operator.

At this point, determining how and to what extent the Orange & Rockland decision will affect the financing of waste-to-energy projects is difficult. As the recent ruling works its way through the judiciary appeals process, waste-to-energy developers will have a better idea whether FERC has pre-empted the state PUCs by exempting qualified facilities from the Federal Power Act, the Public Utility Holding Company Act, and certain state laws.

Judging from the way the NPRs and the recent decision are written, waste-to-energy facilities will not be granted special protection or preference.

The impact of recent rulings on alternative energy payments municipalities and private operators receive from waste-to-energy facilities cannot yet be determined. While the electricity agreement plays an important role in stabilizing disposal costs during the life of a waste-disposal project, the dramatic increase in landfilling fees incurred by local governments — including the expense of hauling waste out of state to find a disposal site — justifies the need for a long-term solution only a waste-to-energy facility can provide. □

David Sokol is president and chief executive officer of Ogden Martin Systems, Fairfield, N.J.



OGDEN MARTIN SYSTEMS

RESOURCE RECOVERY

power in California is unattractive.

Located near Modesto, Calif., the 800-tpd Stanislaus County Resource Recovery Facility will begin commercial operation in early 1989. Under this SO No. 4 agreement with Pacific Gas & Electric (PG&E), the project will receive a capacity payment of \$167 per kilowatt-year and an energy payment of approximately 7.3 cents per kwh, escalated at 7 percent annually during the first 10 years. For the remaining 10 years of the contract, the payment will be based on PG&E's full short-run avoided operating costs.

Stanislaus County is one of the few successfully implemented waste-to-energy facilities in California, in part, because of the attractive energy price, which has helped offset city and county tipping fees.

In working with utilities during the feasibility and implementation phases of waste-to-energy projects, knowing the fuel mix of a utility's capacity is helpful. If the utility is in the process of bringing a major coal-fired or nuclear-power facility online, it will be paying off a long-term debt. The utility will argue any additional generation capacity will have adverse, irreversible repercussions for ratepayers.

With the over-building of thermal capacity during the 1970s, many investor-owned utilities have surplus power margins as high as 15 to 20 percent. Consequently, they have been able to prove to state commissions alternative sources would impact their rate base negatively, resulting in higher consumer rates.

Waste-to-energy system contractors need to keep in mind utilities have worked to earn a "good-neighbor" reputation based on their ability to provide reliable service. Given their long-standing relationship with local residents, bringing utilities into the implementation process early on is wise.

Many state PUCs have a more open, flexible approach to alternative power, and will provide more flexibility in requiring investor-owned utilities to purchase from qualified facilities.

But a recent FERC ruling pertaining to the Orange & Rock-

MUNICIPAL COST INDEXES

The **Producer Price Index** jumped 0.7 percent to 106.5, marking the largest gain among this month's indexes. Both the **Municipal Cost Index** and the **Consumer Price Index** registered 0.3-percent increases, to 114.3 and 117.5, respectively. The **Construction Cost Index** remained steady at 117.2.

In an effort to keep track of the most useful commodities

for its readers, *American City & County* now will feature three new items in **This Month's Marketbasket**. These include communication equipment, pumps and compressors, and tools and dies. The publishers hope this monthly department will continue to be helpful to local-government administrators.

—Compiled by Tim Darnell

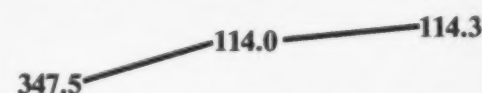
THIS MONTH'S MARKETBASKET

	Current Index	Percent Change From:	
		Last Month	Last Year
Air Conditioners	112.6	-0.1	3.4
Apparel	110.7	0.8	2.4
Asphalt Roofing	92.1	-0.5	0.9
Coal	95.4	0.2	-1.4
Communication Equipment	103.7	0.2	1.3
Concrete Products	109.9	0	0.5
Construction Machinery	111.1	0.2	1.7
Diesel Fuel	54.5	1.9	2.6
Electric Components	116.3	0.4	1.5
Electric Power	107.7	0	-0.2
Fans, Blowers	113.4	0.4	2.5
Floor Coverings	113.5	0.5	3.3
Flow Instruments	116.2	-0.1	2.2
Fuel Oil No. 2	54.5	2.4	0.9
Furniture	123.6	-0.1	4.4
Gasoline	59.6	4.9	1.5
Generator Sets	120.7	0.4	5.3
Glass	109.6	0.4	3.0
Glass Containers	112.1	-0.2	-1.0
Gypsum Products	111.3	-2.0	-14.1
Hardware	113.0	0.3	3.1
Heating Equipment	116.6	0.1	0.9
HVAC Controls	113.9	0.2	0.4
Industrial Chemicals	104.1	0.4	9.3
I.C. Engines	110.9	0.1	1.4
LP Gas	55.0	2.2	-6.5
Lubricants	104.2	0.4	5.0
Lumber	134.1	0.3	6.4
Metal Fabrications	113.9	0.7	9.1
Mixed Fertilizers	1-5.5	0.5	12.2
Motor Vehicle Parts	106.8	0.3	0.8
Mowers	113.1	0	0.8
Natural Gas	77.5	-3.8	-2.5
Office Machines	106.6	0	1.7
Paint	112.9	0.6	5.8
Paper	122.0	0.8	11.0
Passenger Cars	111.4	-0.3	-1.2
Plumbing Fixtures	125.9	0.3	4.9
Plywood	100.3	-1.8	1.0
Portland Cement	103.1	0.3	0.1
Pumps, Compressors	107.8	0.3	2.7
Residual Fuel	42.6	5.2	-21.3
Rubber Products	106.0	-0.7	10.3
Sand, Gravel	121.2	0.3	2.5
Sanitary Papers	114.2	3.0	5.5
Soaps, Detergents	113.2	1.3	3.8
Sporting Goods	105.7	0.3	3.8
Steel Mill Products	110.5	0.8	9.4
Switchgear	112.9	0	2.3
Tires, Tubes	93.9	0.5	3.9
Tools, Dies	110.1	0	1.2
Transformers	107.5	-0.5	0.5
Trucks	110.8	0	-0.7
Valves	112.8	0.3	4.0
Wire, Cable	123.2	-0.8	20.5
Wiring Devices	123.1	-0.2	4.2

At-A-Glance Changes

MUNICIPAL COST INDEX

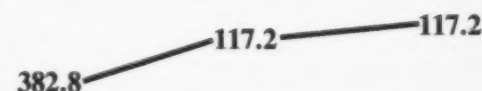
Last Year Last Month This Month



Percent Change From Last: Month 0.3 Year 4.2

CONSTRUCTION COST INDEX

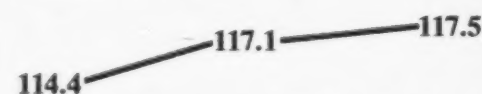
Last Year Last Month This Month



Percent Change From Last: Month 0 Year 2.8

CONSUMER PRICE INDEX (BLS)

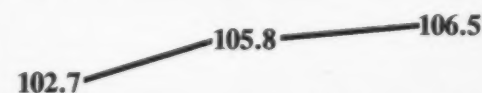
Last Year Last Month This Month



Percent Change From Last: Month 0.3 Year 2.7

PRODUCER PRICE INDEX (BLS)

Last Year Last Month This Month



Percent Change From Last: Month 0.7 Year 3.7

These figures are calculated on a base year of 1982.

QUARTERLY MUNICIPAL TRENDS

	Current Level	Percent Change From:	
		Last Qtr.	Last Year
Receipts	682.4	2.8	8.0
Federal Grants	111.2	10.0	9.8
Durable Purchases	29.3	2.8	11.4
Consumables	45.7	0.4	9.9
Services	430.0	2.1	8.3
Structures	64.8	-0.2	1.1
Salaries, Wages	338.3	2.0	7.9
Surplus	91.7	2.6	10.3
Employment	14.413M	0.9	-18.5